

Title: <b>Senior Bridge Design Engineer</b>	Effective Date: <b>September 17, 2008</b>	Grade: <b>XVIII</b>	Job Category: <b>Professional</b>
Prior Title: <b>Senior Bridge Design Engineer</b>	Prior Effective Date: <b>August 24, 2007</b>	Grade: <b>XVIII</b>	Page: <b>1 of 1</b>

**CHARACTERISTICS OF WORK**

This position is accountable for the design of complex bridge projects to provide construction plans meeting state and federal requirements with a minimum of supervision.

**EXAMPLES OF WORK**

The following examples are intended only as illustrations of various types of work performed. No attempt is made to be exhaustive. Related, similar, or other logical duties are performed as assigned. The Department may require employees to perform functions beyond those contained in job descriptions. The Department may modify job descriptions based on Department needs. The Arkansas State Highway and Transportation Department is an "at will" employer.

- Evaluate survey, soil and hydraulic data and conceive, design and evaluate various bridge types at any location, and recommend type or types for inclusion in the project plans.
- Conceive and produce layouts, structural details and related technical drawings using computer-aided design and drafting (CADD).
- Write specifications to cover construction methods and materials when required for a specific project.
- Assemble design drawings, specifications and bid quantities, and make cost estimates for completed bridge projects.
- Analyze existing bridge structures for load capacity as part of states' continuing bridge inspection and rating program.
- Coordinate, supervise and check work of beginning engineers and structural detailers.

**MINIMUM REQUIREMENTS**

Possession of a current *Arkansas* license to practice professional engineering. Extensive bridge design experience, and working knowledge of the design and construction specifications and materials for all bridge types constructed by the Department.